



Wellworth Type III Cobra Head. Protected by U.S. Patents No. D636,526; D636,518; D638,162 Additional Patents Pending

# MILITARY GRADE LIGHTING SOLUTIONS



# Overview

## Introduction

The U.S. Military is the single largest consumer of energy in the world. According to the U.S. Department of Defense's Federal Energy Management report for 2009 total energy consumption was over \$ 20 Billion.<sup>1</sup> According to an Armed Forces press release, "Energy dependence has grown in the military, burdening budgets, logistics and individual service members." In recent years, through various federal initiatives, including a partnership with the DOD and a national energy team, aggressive goals have been set to reduce energy consumption and to invest in renewable energy sources. The DOD has targeted lighting as one of the ways they can immediately make a significant reduction in consumption.<sup>2</sup>

**"Lighting efficiency improvements present a clear opportunity to decrease energy consumption, which is a priority for the U.S. Army, the Department of Defense and for the entire federal government," Hammack said. "It's been over 130 years since Thomas Edison (developed) the world's first practical incandescent light bulb, and we're undeniably overdue for a jump forward in lighting's future."**

— Katherine Hammack  
Assistant Secretary of the Army  
for Installations and Environment<sup>3</sup>

## Standards & Specifications

Although the DOD has aggressive goals for the next decade and emerging energy technologies are improving every day; they also have some of the most stringent and demanding

Wellworth Type III Cobra Head  
Protected by U.S. Patents No. D636,526; D636,518; D638,162 Additional Patents Pending



Wellworth Type III Cobra Head  
Protected by U.S. Patents No. D636,526; D636,518; D638,162 Additional Patents Pending

performance requirements of any buyer in the world. These challenges have manifested in the attempted procurement of energy technologies, specifically lighting. This challenge was recognized when The United States Air Force passed a Technical Memorandum banning the use of LED (Light Emitting Diode) Technology for outdoor lighting on the bases, citing inaccurate product claims and underperforming products.<sup>4</sup> This ban has since been reevaluated, however the repercussions are lasting. It is clear the military has had challenges finding "Military Grade" lighting solutions to meet their needs.

## EverLast® Lighting: Military Grade

The industrial grade induction light fixtures manufactured by EverLast® meet the strict criteria of the US Military not only providing the long life and energy savings required, but also incorporating superior optics, heat management, and sustainable engineering elements. EverLast® fixtures have been successfully installed at Army, Coast Guard, Air Force, National Guard, Marine Corps and Navy facilities in various applications including significant coverage in roadway lighting. These installations will greatly assist the Department of Defense in its efforts to reduce energy consumption while maintaining high light quality and safety that is required at military facilities.



# Case Study: U.S.A.F.

## Eglin Air Force Base Upgrades Street Lighting

The U.S. Air Force selected patent-pending EverLast® streetlight fixtures in an effort to reduce energy costs at Eglin Air Force Base in Valparaiso, Florida. According to Eglin officials, both energy and maintenance savings were critical factors in the decision-making process, and due to strict limitations on where LEDs can be used, the Air Force sought out an alternative solution that was equally efficient. EverLast® induction cobra head streetlights were deemed more cost effective and found to produce better illumination than LED streetlights that are currently commercially available.

**"In essence, the Army is building green, buying green and going green!"**

-Tad Davis

Deputy Assistant Army Secretary for  
Environment, Safety and Occupational Health

Historically, the military has not been considered environmentalists or conservationists; however, in 2009, approximately 70 Eglin facility managers attended an energy audit training course to familiarize themselves with their facilities' energy usage and to help them better identify problem areas and opportunities for energy efficiency upgrades. Lighting upgrades are being made as part of a base-wide effort to make Eglin the Department of Defense's leader in energy conservation and stewardship.<sup>2</sup>



UC Davis, CA

Wellworth Type III Cobra Head

Protected by U.S. Patents No. D636,526; D636,518; D638,162 Additional Patents Pending

**"What we are doing in the Navy is treating energy as fundamentally an issue of national security. And that includes improving the energy efficiency of all of the Navy and Marines' buildings."**

-Ray Mabus

Secretary of the Navy



Wellworth Type III Cobra Head

Protected by U.S. Patents No. D636,526; D636,518; D638,162 Additional Patents Pending

PHOTO CREDIT: Kathreen Fontecha / CLTC, UC Davis

©Regents of the University of California, Davis Campus, California Lighting Technology Center

In March 2010, the Department of the Air Force released an Engineering Technical Letter (ETL) as guidance and criteria for specifying, designing and installing LED luminaires for interior and exterior applications at Air Force installations. The ETL states that due to a slow return on investment and inconsistent performance claims, LEDs are not permitted for interior or exterior lighting applications except when used for exit signs, general signage, traffic signals, step lighting, or directional accents and other low-level lighting applications.<sup>1</sup>

On February 16, 2011 another branch of the military committed to taking steps toward energy-efficiency.

The Navy signed a Memorandum of Agreement with the University of California, Davis to collaborate on energy-efficient, next-generation lighting systems. Their goal is to work with the California Lighting Technology Center (CLTC) and affiliates to install and demonstrate adaptive exterior lighting technologies at military facilities in order to improve safety and energy savings. By working directly with renowned research partners and testing facilities, namely CLTC at UC Davis, EverLast® brings next generation lighting solutions to the market.<sup>3</sup>

# Case Study: U.S. Army

## Fort Drum Military Base Completes Major Installation

Fort Drum, a 108,000 acre Army base, in New York, supports the mobilization of approximately 80,000 troops annually. In operation since 1908, Fort Drum is home of the 10th Mountain Division, a group trained to rapidly deploy by air, sea and land to any place in the world.

Fort Drum is an American institution, so when it came time to implement a high-efficiency street lighting initiative, it was no surprise they selected EverLast® U.S. Cobra Head and Shoe Box Fixtures - state-of-the-art induction lighting, from an American company.

**“When I began working with the base as an energy consultant, they were already aware that replacing their inefficient lighting was one of the fastest ways to reduce energy consumption and maintenance costs. They originally considered LED technology as well, but after looking at tangibles such as ROI, performance and sustainability, the induction products manufactured by EverLast Lighting quickly became the obvious solution.”**

**-Stuart Kirscht**  
Vice President of  
Retro-Tech Systems, Inc.

With its green manufacturing facility located in Jackson, Michigan, EverLast® was the best choice for supplying the first phase of more than 1,000 induction fixtures needed at the base. EverLast® worked closely with local contractors, ESCOs, and engineers at Fort Drum to find the right fixture for the project. Energy and maintenance savings were two critical factors in



Fort Drum, NY

Wellworth Type III Cobra Head  
Protected by U.S. Patents No. D636,526; D636,518; D638,162 Additional Patents Pending

the decision-making process. EverLast® offers a 100,000 hour lamp life, coupled with an efficacy of 85 lumens per watt, making it a very energy-efficient and cost-effective lighting solution. Additionally, maintenance costs are virtually eliminated due to the extended life of the induction lamp.

Environmental concerns were also prevalent throughout the decision-making process. Not only was there a desire to reduce their carbon footprint, but the processes involved in manufacturing the fixture were vital as well. EverLast® U.S. Made Cobra and Shoe Box fixtures utilize 80% recycled polycarbonate resin in the fixture housing, making them an industry leader in “green” manufacturing.

Many cities and municipalities have received Energy Efficiency and Conservation Block Grant (EECBG) monies as part of the American Recovery and Reinvestment Act (ARRA), and have been charged with the task of selecting U.S. manufactured goods. EverLast® U.S. Induction Cobra Head and Shoe Box Fixtures exceed the requirements outlined in the ‘Buy American’ provision (Section 1605) of the ARRA and engage more than 10 manufacturing partners from across the United States in the production process.

Wellworth Shoe Box  
Protected by U.S. Patents No. D636,526; D636,518; D638,162 Additional Patents Pending

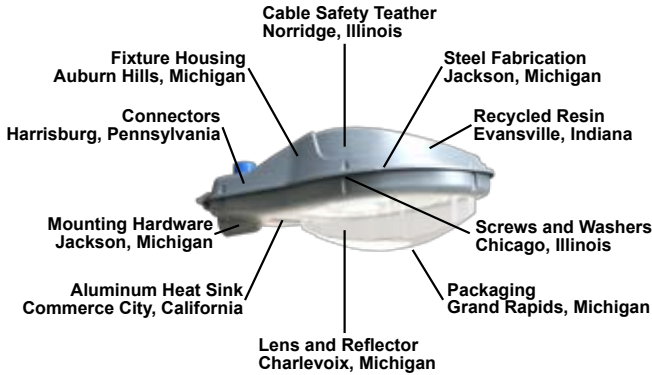


Mondavi, Davis, CA

# By Purchasing The EverLast® U.S. Made Cobra Head, You Also Support 10 Additional U.S. Manufacturers

When you use ARRA funding, it is the purchaser's responsibility to meet the requirements of Section 1605. Buying a fixture that is produced outside the U.S. does not meet these requirements. EverLast® meets all ARRA funding requirements.

## U.S. Manufacturers



Final Assembly, Testing and Packaging At EverLast® Green Facility World Headquarters in Jackson, Michigan

\*Protected by U.S. Patents No. D636,526; D636,518; D638,162 Additional Patents Pending

## EverLast® Cobra Head

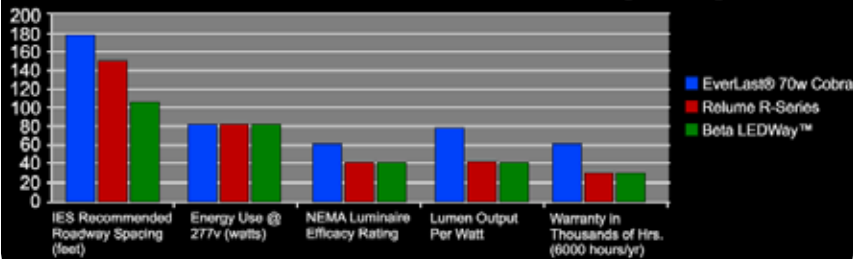
Patented Features Include:



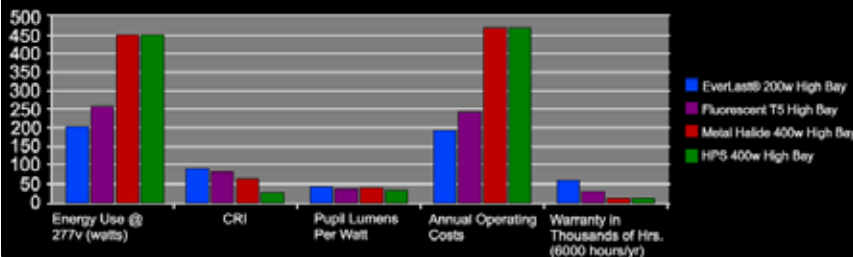
Go Green

- 80% recycled content
- 50% higher efficiency than LED
- 30% better light distribution
- No external fasteners that can fail
- All weather IP65 rated design
- 10 year warranty from a U.S. manufacturer

## EverLast® VS. LED Street Lighting



## EverLast® VS. Traditional Indoor Sources



# NOTABLE CLIENTS



U.S. AIR FORCE



United States Army at Fort Drum, NY

United States Air Force at Eglin, FL

United States Air Force at Whiteman, MO

United States Navy at Pearl Harbor, HI

United States Marine Corps at Key West, FL

United States Coast Guard at Clearwater, FL

United States Coast Guard at Mobile, AL

United States Department of Agriculture, D.C.

Mountain Warfare Training Center at Bridgeport, CA

NASA, Johnson Space Center at Houston, TX

NASA at Wallops Island, VA

Lockheed Martin

The American Embassy, Manila Philippines

Pine Bluff Arsenal, Pine Bluff, AR

## ABOUT US

EverLast® Lighting is a subsidiary of Full Spectrum Solutions, Inc., which was founded in 1997, and has quickly become the leading manufacturer of energy-efficient lighting solutions for roadway, parking structure, facility and area lighting applications. We offer 43 lines of products with more than 4 models in each line.

By incorporating bi-level controls with on/off photosensors, our EverLast® induction fixtures can reduce energy use by up to 70 % and have won national awards for sustainability in utilizing SMART technology.

We are strong believers in practicing what we preach, so when we outgrew our facility in 2008, we decided to build a state-of-the-art "green" facility where we could begin manufacturing a variety of energy-efficient EverLast® fixtures. We completed construction of our new 72,000 sq. ft. world headquarters and manufacturing facility in the beginning of April 2010.

Several of the building's features include: geothermal heating and cooling; solar/wind powered hybrid parking lot lighting; recycled energy-efficient window glass; pervious concrete that absorbs rainwater and filters it back through the watershed; day-lighting controls; and solar tracking skylights that track the sun throughout the day to capture more of the sun's usable light by reflecting light that would be otherwise lost when the sun is low in the horizon.



EverLast® World Headquarters

[www.everlastlight.com](http://www.everlastlight.com)

Scan Me!

